

# Georgia - Improving General Education Quality

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# **Overview**

### Identification

#### **COUNTRY**

Georgia

#### **EVALUATION TITLE**

Improving General Education Quality

#### **EVALUATION TYPE**

Independent Impact Evaluation

#### **ID NUMBER**

DDI-MCC-GEO2-MPR-IGEQ-2015-v1

#### Overview

#### **ABSTRACT**

The school rehabilitation activity seeks to decrease student and teacher absenteeism, increase students' time on task, and, ultimately, improve learning and labor market outcomes. We propose a mixed-methods study design, with three components: (1) a process evaluation examining the program's implementation and costs; (2) a randomized controlled trial (RCT) impact evaluation using a school-level stratified random assignment design, and (3) in-depth analysis of the relationship between changes in school infrastructure and changes in the learning environment, using qualitative methods in a subset of study schools.

#### **EVALUATION METHODOLOGY**

Randomization

### **UNITS OF ANALYSIS**

Individuals

#### KIND OF DATA

Sample survey data [ssd]

#### **TOPICS**

Topic	Vocabulary	URI
Education	MCC Sector	

#### **KEYWORDS**

Education, School rehabilitation, Teacher training

# Coverage

#### **GEOGRAPHIC COVERAGE**

The exact number of rehabilitated schools is still being determined but is expected to include up to 130 schools throughout Georgia. The study sample will include a control group of schools that is approximately equal in size to the number to the treatment schools.

#### **UNIVERSE**

To estimate the impacts of the school rehabilitation activity, our study uses a school-level, stratified random assignment design. Schools assigned to the treatment group will at minimum receive detailed rehabilitation design assessments, and-where rehabilitation is feasible-treatment schools will receive the program's full set of infrastructure rehabilitation services.

# **Producers and Sponsors**

#### PRIMARY INVESTIGATOR(S)

Name	Affiliation
Mathematica Policy Research	

#### **FUNDING**

Name	Abbreviation	Role
Millennium Challenge Corporation	MCC	

# Metadata Production

#### **METADATA PRODUCED BY**

Name	Abbreviation	Affiliation	Role
Millennium Challenge Corporation	MCC		Metadata Producer

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# MCC Compact and Program

#### **COMPACT OR THRESHOLD**

Georgia II

#### **PROGRAM**

The Millennium Challenge Corporation (MCC) is supporting Georgia's efforts to improve educational outcomes by sponsoring the Improving General Education Quality (IGEQ) Project, which includes three components. The Improved Learning Environment Infrastructure (ILEI) component invests in school rehabilitation to provide safe learning environments that include adequate facilities and heating. The Training Educators for Excellence (TEE) component supports professional development by training and mentoring teachers to improve competencies in science, technology, engineering, and math subjects and by training principals to strengthen school management. Finally, the Education Assessment Support (EAS) component supports Georgia's ongoing efforts to improve educational outcomes through rigorous assessments and fostering a result-oriented education system.

#### MCC SECTOR

Education (Edu)

#### **PROGRAM LOGIC**

The school rehabilitation activity is designed to upgrade the quality of physical infrastructure and create an improved learning environment in program schools. Examples of potential rehabilitation areas include systems for heating (replacing wood stoves with central heating); lighting; water and plumbing; lavatories; recreational facilities; science laboratories; building interiors (flooring, stairs, and classroom walls); and building exteriors (roofing and masonry). The activity plans to rehabilitate approximately 105 schools throughout Georgia and the work is scheduled to take place over the course of three construction seasons (the summers of 2015, 2016, and 2017). According to the program's logic model, these inputs are intended to decrease students' and teachers' absenteeism and improve time on task during the school day, leading to improved student learning and higher educational attainment outcomes. Although it is not reflected in the program's current logic model, we also believe it is plausible that rehabilitating schools could improve the health and well-being of students, which might provide another pathway for the intervention to affect learning and other long-term outcomes. The program logic developed by MCC and Millennium Challenge Account-Georgia (MCA-G) staff presents a series of (hypothesized) causal links among program inputs and outputs and short-, medium-, and long-term outcomes that potentially support the project's overarching goal of poverty reduction through economic growth. Each of the links in the program logic represents an assumption by IGEQ program designers about how the activities will affect the compact's beneficiaries, which include students, teachers, school administrators, and policymakers in relevant Government of Georgia (GoG) ministries and centers. Assumptions in the program logic also provide the basis for MCC's economic rate of return (ERR) calculations for each activity.

#### **PROGRAM PARTICIPANTS**

The evaluation will focus on estimating the impacts of school rehabilitation on students and teachers. In particular, the evaluation's findings will pertain to the population of students enrolled or potentially enrolled in the types of schools selected to receive rehabilitation services. The evaluation's primary sample of interest will be the population of students enrolled in grade 8 or grade 10 at baseline in study schools—we will track these two cohorts of students over time and measure their outcomes during two follow-up years.

# **Sampling**

# **Study Population**

To estimate the impacts of the school rehabilitation activity, our study uses a school-level, stratified random assignment design. Schools assigned to the treatment group will at minimum receive detailed rehabilitation design assessments, and-where rehabilitation is feasible-treatment schools will receive the program's full set of infrastructure rehabilitation services.

# Sampling Procedure

To develop the random assignment procedure, the design first stratifies the sample of schools by region. Within regions, we then consider the benefits of further stratifying the sample on the following school-level characteristics:

- · Total enrollment
- · Secondary enrollment (students in grades 10 to 12)
- · Size of school building
- · Government rating of school infrastructure conditions
- · Minority language status (indicator for instruction primarily in Azeri or Armenian)
- · Rural status (indicator for school located in a village or mountainous area)
- · Average baseline test scores in math, history, and literacy

# **Deviations from Sample Design**

During the 2013-2014 school year (before random assignment), MCA-G hired a design contractor and partially or fully completed rehabilitation designs for several schools in program regions. Due to implementation delays, no rehabilitation work took place in these schools during the 2014 summer construction season, meaning the predesigned cases could be included in the random assignment pool for this evaluation. In total, 29 program-eligible schools have existing rehabilitation designs. To realize cost savings from this prior design work, at the request of MCA-G and MCC, the evaluation will give the predesigned schools a higher probability of being assigned to treatment (66 percent) than the schools currently lacking designs. To do so, our approach places the pool of predesigned schools in its own separate set of random assignment blocks. The study's impact analyses will adjust statistically for differences in the probability of selection into treatment associated with these predesigned strata.

# **Questionnaires**

# Overview

Student survey: Survey data on student characteristics, recallbased measures of attendance (to be validated using site visits), perceived determinants of student attendance, perceptions of school building quality and safety, self-reported respiratory health, and perceptions of time on task during the school day. This will also include an assessment of student learning.

Parent Survey: Survey data on family demographics and socioeconomic characteristics, recall-based measures of student attendance, perceived determinants of student attendance, and perceptions of school building quality and safety.

Teacher Survey: Survey data on teacher experience, demographic characteristics, certifications, perceptions of the quality and safety of school facilities, recall-based measures of time spent on instruction, and student attendance records.

School Director Survey: Survey data on school director operations and maintenance practices, average operations and maintenance expenditures, school facility usage, and student attendance records.

# **Data Collection**

### **Data Collection Dates**

Start	End	Cycle
2015	2016	(Planned) Baseline data collection in Phase I regions (Mtskheta-Mtianeti, Racha- Lechkhumi and Kvemo Svaneti, Samtskhe-Javakheti, and Shida Kartli)
2016	2017	(Planned) One-year follow-up for Phase I regions, baseline for Phase II regions (Kakheti and Kvemo Kartli)
2017	2018	(Planned) Two-year follow-up and qualitative data collection in Phase I regions, oneyear follow up in Phase II regions, baseline in Phase III regions (Guria, Imereti, Samegrelo-Zemo Svaneti, and possibly Adjara)
2018	2019	(Planned) Two-year follow-up and qualitative data collection in Phase II regions, oneyear follow up in Phase III regions. Mathematica will collect additional process evaluation data (for example, implementation reports and cost records) after completion of rehabilitation work in Phase III regions
2019	2020	(Planned) Two-year follow-up and qualitative data collection in Phase III regions

### **Data Collection Notes**

Due to the staggered approach to data collection, the 2017 data collection round will be the only year in which the local data collection firm conducts site visits in all of the evaluation's treatment and comparison schools. Thus, in most years the number of visited schools will be smaller, potentially reducing the logistical burdens associated with the data collection effort.

# Questionnaires

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# **Data Collectors**

Name	Abbreviation	Affiliation
Institute for Polling and Marketing	IPM	
National Assessment and Examination Center	NAEC	Georgia

# **Data Processing**

No content available

# **Data Appraisal**

No content available